

FIGURE 1 (PRIOR ART)

PARALLEL
BINARY SEARCH

~ 26
SORT N ENTRIES
OF TABLE IN
INCREASING
ORDER

~ 28
ASSIGN UNIQUE
ENTRY TO EACH
OF N PARALLEL
PROCESSORS

~ 30
EACH OF N PARALLEL
PROCESSORS COMPARES
ITS ASSIGNED ENTRY
TO SEARCH KEY

~ 32
ASSIGNED
ENTRY \leq
SEARCH
KEY?

~ 34
THAT PARTICULAR
PARALLEL PROCESSOR
OUTPUTS A "0"

~ 36
THAT PARTICULAR
PARALLEL PROCESSOR
OUTPUTS A "1"

~ 38
EACH OF N PARALLEL
PROCESSORS OUTPUTTING
A "0" READS ITS
SUCCESSOR'S OUTPUT

~ 40
SUCCESSORS
OUTPUT
= 1
?

~ 42
OUTPUT INDEX
OF ASSIGNED
ENTRY

END

FIGURE 2 (PRIOR ART)

09923262 080601

109080" 2922660

44 ↗

48 ↗

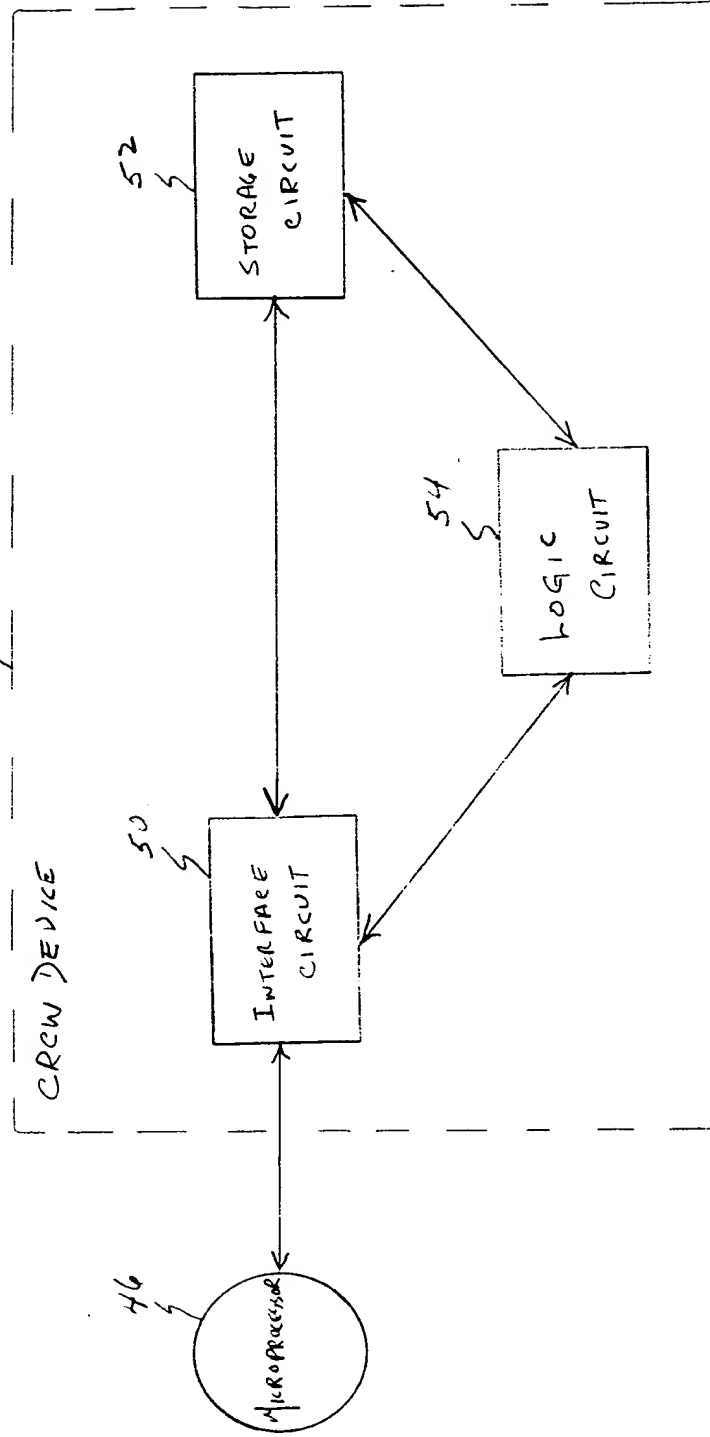


FIGURE 3

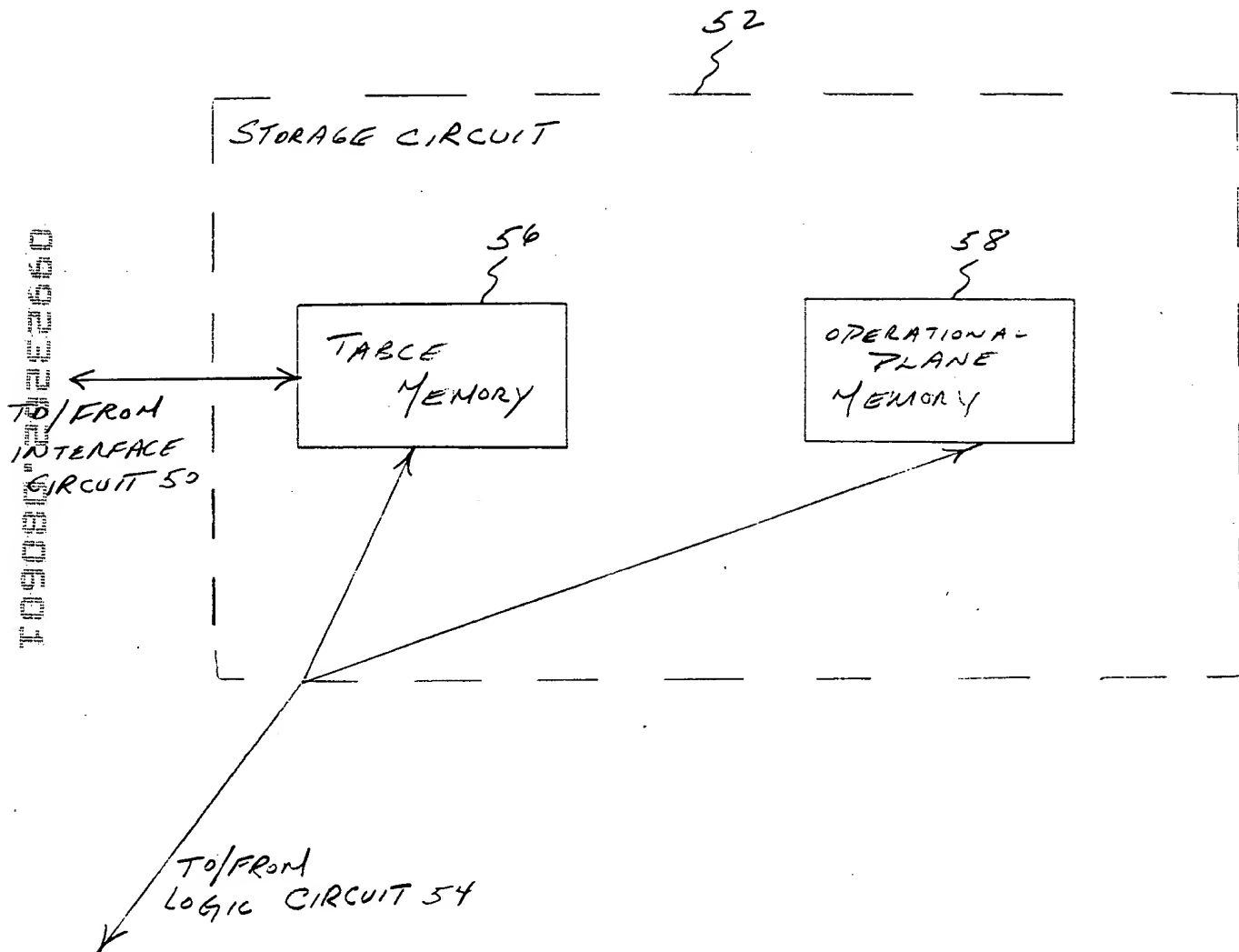


FIGURE 4

090326-080501

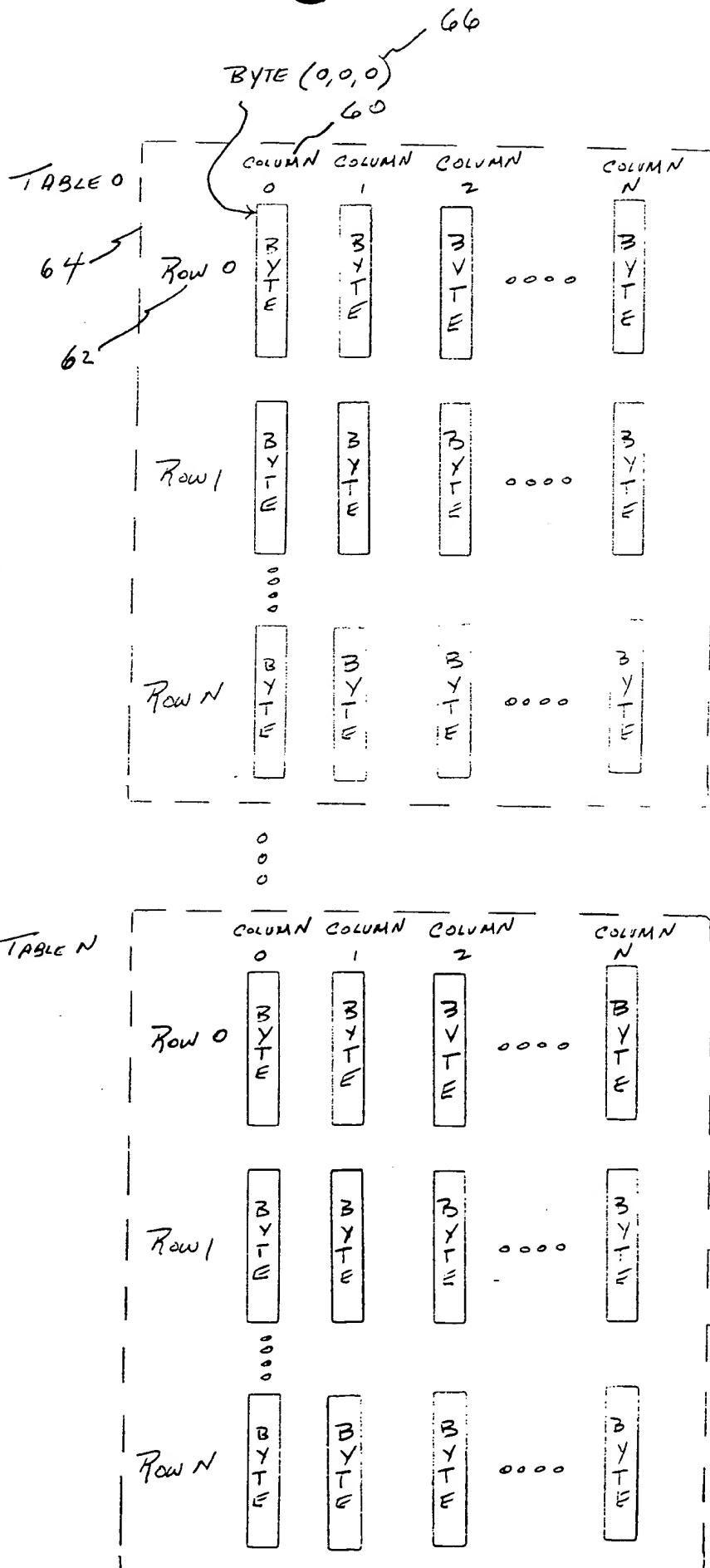


FIGURE 5

MICROPROCESSOR

CRCW DEVICE

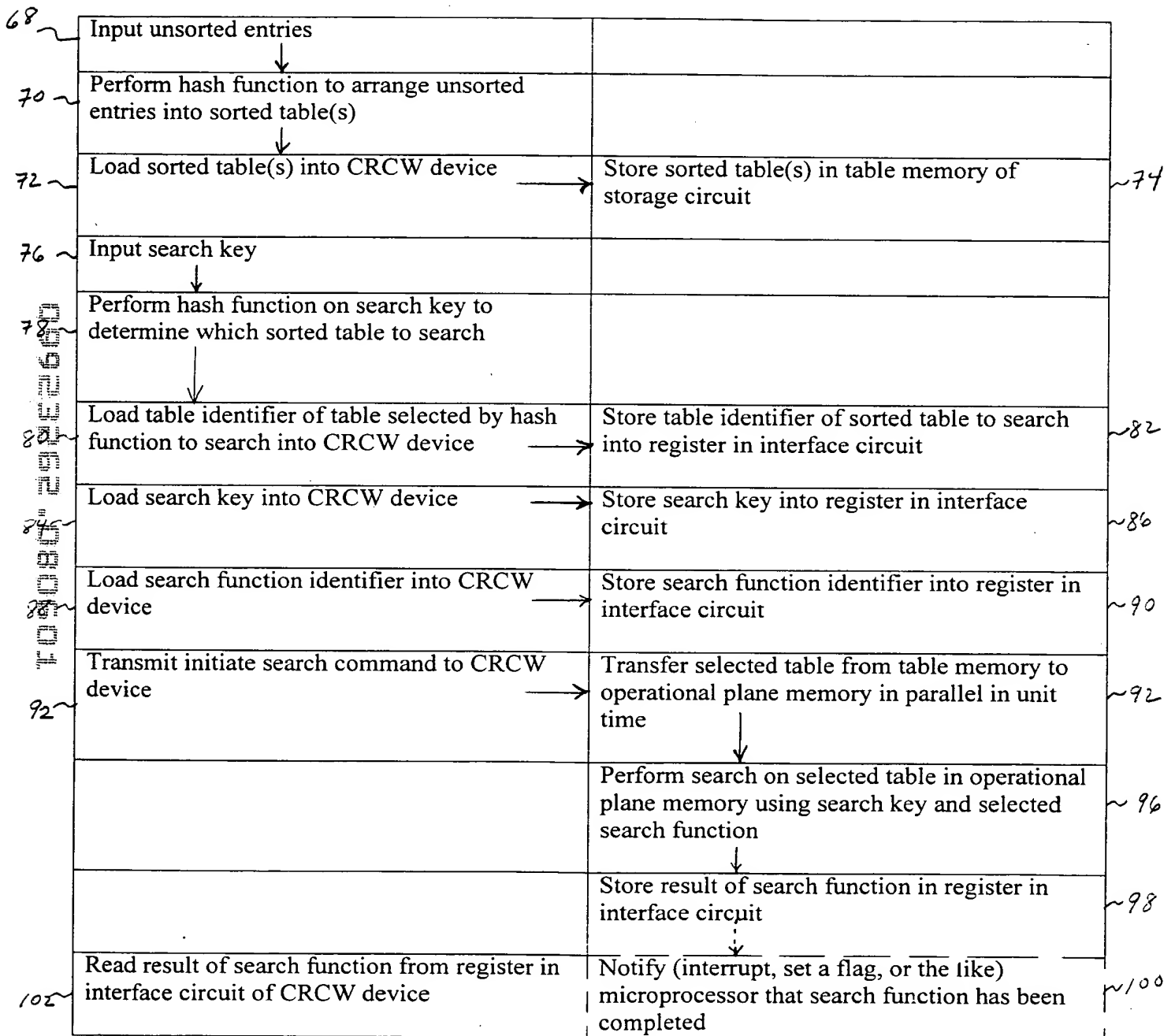


FIGURE 6